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## Challenges of a Statin Trial in Older People

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## CHALLENGES OF A STATIN TRIAL IN OLDER PEOPLE

*To the Editor:* To clarify whether starting statin treatment in healthy older people is beneficial or harmful, the National Institute on Aging and the National Heart, Lung, and Blood Institute multidisciplinary expert panel recommends randomized controlled trials in people aged 75 years and older.<sup>1</sup> Although well in line with evidence-based medicine, in this instance I would not be enthusiastic about the overall benefits of such trials. Remembering the Hypertension in the Very Elderly Trial (HYVET) in people aged 80 years or older,<sup>2</sup> and frequent use of statins among older people today, participant recruitment for a placebo-controlled trial would be cumbersome. Furthermore, the interpretation of results for the whole older population would be challenging.

Contrary to the treatment of hypertension, which even in old age seems to rapidly alleviate heart burden and reduce incident heart failure (as demonstrated in HYVET<sup>2</sup>), such rapid effects appear less likely with treatment of hypercholesterolemia in older people. Because of competing causes of mortality, my educated guess is that no effect could be demonstrated. Of course, that result would give valuable advice against starting a statin in primary prevention after the age of 75 to 80 years, but that is already assessed critically.<sup>3</sup>

My greatest fear is that a negative result in a primary prevention trial would falsely indicate statin treatment to be useless in all older people. This might lead to unnecessary discontinuation of ongoing statin treatments solely because of age. However, starting a statin before old age robustly prevents cardiovascular events,<sup>4</sup> and accordingly, several observational studies show that older statin users do have a better prognosis,<sup>5</sup> even irrespective of their functional status.<sup>6,7</sup>

Rather than putting resources on an unsecure and huge trial in people older than 80 years, more efforts should be

made to promote starting and adhering to statin treatment well before old age among those with cardiovascular risk.

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**Conflicts of Interest:** I have made various cooperation (research, consultative, educational) with companies marketing generic statins, and use myself a statin daily.

**Author Contributions:** Timo Strandberg is the sole author.

**Sponsor's Role:** None.

## REFERENCES

1. Singh S, Zieman S, Go AS, et al. Statins for primary prevention in older adults—moving toward evidence-based decision-making. *J Am Geriatr Soc* 2018;66:2188-2196.
2. Beckett NS, Peters R, Fletcher AE, et al. Treatment of hypertension in patients 80 years of age or older. *N Engl J Med* 2008;358:1887-1898.
3. Strandberg TE, Kolehmainen L, Vuorio A. Evaluation and treatment of older patients with hypercholesterolemia: a clinical review. *JAMA* 2014;312:1136-1144.
4. Collins R, Reith C, Emberson J, et al. Interpretation of the evidence for the efficacy and safety of statin therapy. *Lancet* 2016;388:2532-2561.
5. Orkaby AR, Gaziano JM, Djousse L, Driver JA. Statins for primary prevention of cardiovascular events and mortality in older men. *J Am Geriatr Soc* 2017;65:2362-2368.
6. Pilotto A, Panza F, Copetti M, et al. Statin treatment and mortality in community-dwelling frail older patients with diabetes mellitus: a retrospective observational study. *PLoS One* 2015;10(6):e0130946. <https://doi.org/10.1371/journal.pone.0130946>.
7. Pilotto A, Gallina P, Panza F, et al. Relation of statin use and mortality in community-dwelling frail older patients with coronary artery disease. *Am J Cardiol* 2016;118:1624-1630.

See the Reply by Singh et al.

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